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## ONE BASE MAP IN PLACE OF FIVE

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[Alameda, Calif., January 1940]

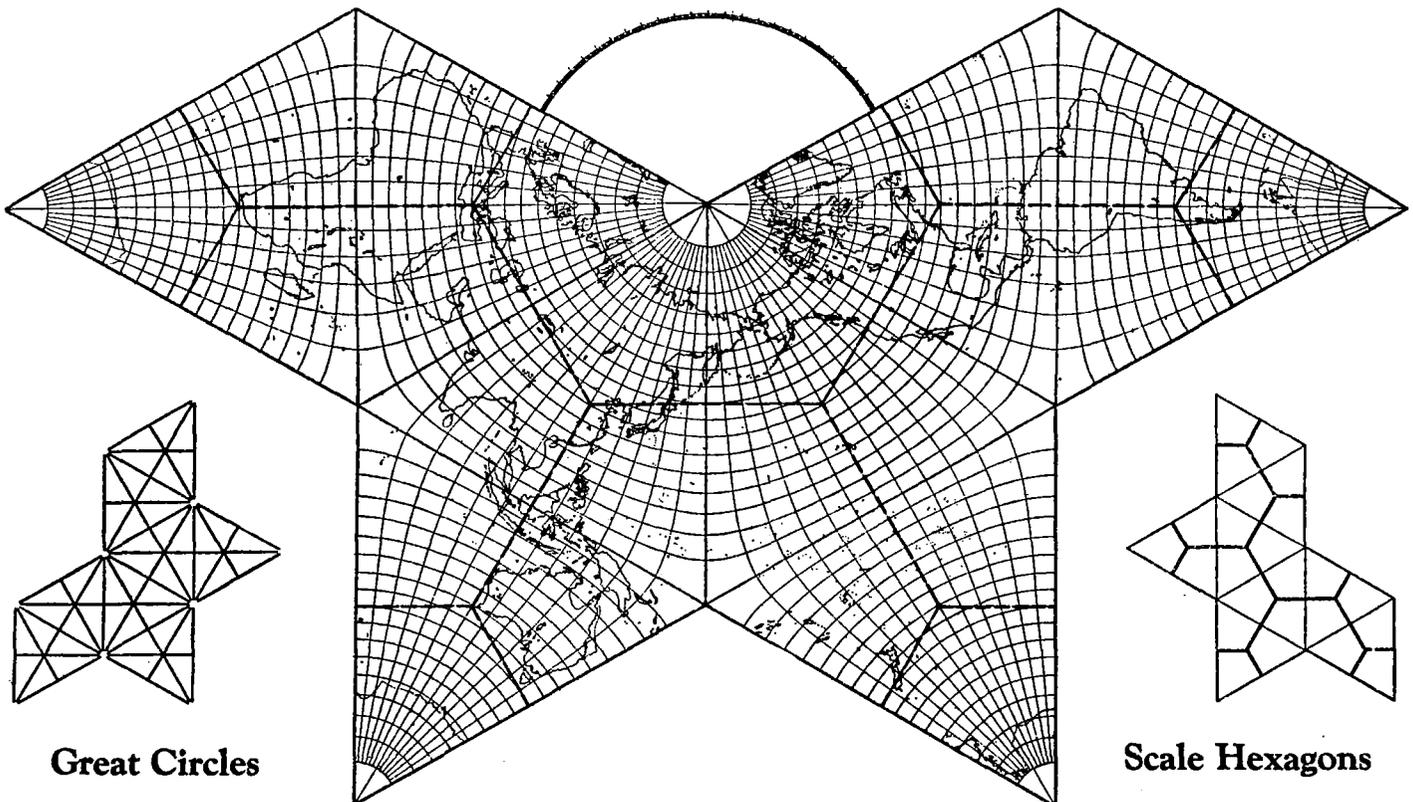
In the April 1929 issue of the MONTHLY WEATHER REVIEW, the writer showed how all synoptic charts to serve the needs of agriculture could be cut from the conformal variant of his "Butterfly Map," and after entry of data be reassembled into weather maps of the whole world; on page 132 was a map of the North Atlantic on this octahedral projection prepared in Copenhagen.

This suggestion was later overruled in favor of the five-map idea suggested in 1910, adopted later by the International Commission and again adopted in 1937 at Salzburg.

It appears to the writer, however, that for obvious and compelling reasons the one-map idea must win out in the end. In the first place, since 1929, the rapid progress in radio broadcasting has made weather reports promptly available from every ship at sea for the use of every station on land. In the second place, since 1929, the great development of aviation, notably over the Pacific, has created a demand for a weather survey on one synoptic chart, not only from the North Pole to the Equator as on the map proposed in Copenhagen, but from Pole to

Pole across the Equator. A third advantage of the one map, not emphasized in 1929 because not then realized, is that distances between any two points on the globe can be accurately determined exactly as shown on all Great Circle sailing diagrams; not one of these sailing diagrams includes such flying routes as that between Berlin and Lima, or between London and Port Darwin, whereas on the octahedral system such comparisons are easily made graphically.

To summarize: since 1929, aeronautical meteorology has become coordinate in importance with the older fields of applied meteorology, and requires one continuous chart; the writer contends that the one-map system is demonstrably better for all applications, and logically should dominate. In the interests of unity and standardization along scientific lines so all-important to the future of meteorology, he emphatically urges that the present ruling in favor of five base maps be reversed in favor of one. This action may not be easy, any more than the problem of designing an adequate base map was easy, but it should not be impossible.



Great Circles

Scale Hexagons